



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

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Memorandum

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To: Arthur-Jean Williams, Chief  
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Subject: Effects Determination for Methomyl for Pacific Anadromous Salmonids

We reviewed data and other information for methomyl, a registered insecticide named by the Washington Toxics Coalition (WTC) and included in the court order for 'effects determinations' and potential consultation with the National Marine Fisheries Service. A Reregistration Eligibility Decision (RED) for methomyl was issued in December of 1998. Methomyl is registered nationally for use on a wide variety of agricultural crops. Major uses in California include alfalfa, lettuce, tomatoes, and grapes, but usage information is lacking for Oregon, Washington, and Idaho. We have adapted the more general findings of the RED to develop an analysis of the potential for effects of methomyl on endangered and threatened Pacific salmon and steelhead Evolutionary Significant Units (ESUs). OPP's levels of concern are exceeded for risks to endangered fish and to populations of aquatic invertebrates. Therefore, a potential exists for direct effects to the ESUs as well as indirect effects due to loss of food resources.

Based on the RED and additional considerations indicated in our analysis and other attached or referenced materials, we conclude that the use of methomyl will have no effect on two salmon and steelhead ESUs but may affect 24 ESUs. However, there is some uncertainty in our assessment, because current products registered for agricultural use can only be purchased and applied by certified (i.e., trained) applicators and require a no-spray buffer between surface

waters and the treatment site of 25 feet for ground application and 100 to 450 feet for aerial application. Current OPP refined models for estimating aquatic concentrations of pesticide do not account for a buffer, and we cannot quantify how much estimated environmental concentrations would decrease as a result. We will need to consult with the National Marine Fisheries Service to determine if such a no-spray buffer is sufficiently protective of listed salmonids and their cover plants or if other measures are warranted to protect these ESUs.

attachments